



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,582	06/24/2003	John J. Breen	16356.803 (DC-04938)	1625
27683	7590	12/06/2005	EXAMINER	
HAYNES AND BOONE, LLP 901 MAIN STREET, SUITE 3100 DALLAS, TX 75202			TIBBITS, PIA FLORENCE	
			ART UNIT	PAPER NUMBER
			2838	

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/602,582	BREEN ET AL.
	Examiner Pia F. Tibbits	Art Unit 2838

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 02 November 2005.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
  - 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 17-24 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

This office action is in answer to the RCE and amendment filed 11/2/2005. Claims 1-24 are pending, of which claims 1-16 are withdrawn, while claims 17 and 24 are amended.

***Specification***

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter: "command". See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction is required.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Stanesti et al.** [hereinafter Stanesti][20040160213] and **Smart Battery System Specifications @ <http://www.sbs forum.org/specs/sbsel100.pdf>.**

Stanesti discloses in figures 1-6 an information handling system/laptop computer [see page 2, column 1] comprising: a processor CPU; a system bus [see fig.2]; a memory coupled to the processor through the system bus; a power supply system operable to provide power to the processor, the bus and the memory [see fig.1], the power supply system being connectable to an AC adapter 104 for deriving power from an AC power source [see paragraph 0019]; a controller 120 coupled to the processor and memory through the system bus, the controller 120 operable to control the power supply system; and wherein the power supply system includes: a pair of smart batteries (1-k) each capable of being individually selected to be operable, wherein each of the smart batteries includes: an electronics device/"smart battery" hardware and software, each electronics device being coupled to the controller to jointly control charging and discharging the smart battery (1-k), each battery being coupled in series to a

Art Unit: 2838

charge switch CSW <sub>1-k</sub>, a discharge switch DSW <sub>1-k</sub>, and the charge and discharge switches being closed in response to the electronics device and the controller being in agreement to charge one of the smart batteries, and either of the charge or the discharge switches being opened in response to directions from the electronics device/"smart battery" hardware and software or the controller 120 [see paragraph 0024], and a battery charger 222 operable to receive charge from the AC adapter 104 and provide the charge to a selected one of the smart batteries; and a power source selector 214 operable to select either the smart batteries or the AC power source [see fig.2]. Stanesti does not disclose a rechargeable cell, and each rechargeable cell being coupled in series to the charge switch CSW <sub>1-k</sub>, and the discharge switch DSW <sub>1-k</sub>.

As to a memory coupled to the processor through the system bus, it is an inherent function of a laptop computer to include a memory in order to continuously monitor the power supply, its functions, etc., and MPEP 2100 states that the disclosure of a limitation may be expressed, implicit or **inherent**.

As to a rechargeable cell, it is an inherent function of a "smart battery" to include a rechargeable cell in order to function as a power supply, and MPEP 2100 states that the disclosure of a limitation may be expressed, implicit or **inherent**.

Stanesti discloses on page 2, paragraph 0024 that the laptop computer power supply may employ "smart batteries" (see manufacturer's specification). "Smart Battery" by definition is a battery equipped with specialized hardware/ electronics device that provides present state and calculated and predicted information to its SMBus Host under software control.

As to each rechargeable cell being coupled in series to the charge switch CSW <sub>1-k</sub>, and the discharge switch DSW <sub>1-k</sub>: it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a charge switch CSW <sub>1-k</sub>, and a discharge switch DSW <sub>1-k</sub> for each rechargeable cell, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art, and it has no patentable significance unless a new and unexpected result is produced, see *In re Harza*, 274F.2d 669, 124 USPQ 378 (CCPA 1960).

As to claims 18-24, see remarks and references for claim 17 above.

4. Claims 17-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over prior art disclosed by applicant **Shyr et al.** [hereinafter Shyr][5903764] and **Smart Battery System Specifications @ <http://www.sbs forum.org/specs/sbsel100.pdf>.**

Shyr discloses in figures 1-12 an information handling system [see fig.1a] comprising: a processor CPU 32; a system bus [see fig.1a], a memory 32 coupled to the processor 32 through the system bus [see fig.1a]; a power supply system operable to provide power to the processor, the bus and the memory [see fig.1a], the power supply system being connectable to an AC adapter 71 for deriving power from an AC power source; a controller 82 coupled to the processor and memory through the system bus [see fig.2a], the controller 82 operable to control the power supply system; and wherein the power supply system includes: a pair of smart batteries (A-B) each capable of being individually selected to be operable, wherein each of the smart batteries includes: an electronics device/"smart battery" hardware and software, each electronics device being coupled to the controller to jointly control charging and discharging the smart battery (A-B), each battery being coupled in series to a switch 64a, 64b and the switches 64a, 64b being closed in response to the electronics device and the controller being in agreement to charge one of the smart batteries (A-B), and either of the switches being opened in response to directions from the electronics device/"smart battery" hardware and software or the controller 120 [see column 5, lines 7-30], and a battery charger 26 operable to receive charge from the AC adapter 71 and provide the charge to a selected one of the smart batteries (A-B); and a power source selector 102a operable to select either the smart batteries or the AC power source [see fig.1a]. Shyr does not disclose a rechargeable cell, and each rechargeable cell being coupled in series to a charge switch and a discharge switch.

As to a rechargeable cell, it is an inherent function of a "smart battery" to include a rechargeable cell in order to function as a power supply, and MPEP 2100 states that the disclosure of a limitation may be expressed, implicit or **inherent**.

Art Unit: 2838

Shyr discloses "smart batteries" (see manufacturer's specification). "Smart Battery" by definition is a battery equipped with specialized hardware/ electronics device that provides present state and calculated and predicted information to its SMBus Host under software control.

As to the charge switch being separable from the discharge switch: it would have been obvious to one of ordinary skill in the art at the time the invention was made to make separable the charge switch separable from the discharge switch in order to reduce the wear in the electronics, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961). See MPEP 2144.04.

As to each rechargeable cell being coupled in series to a charge switch and a discharge switch: it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a charge switch and a discharge switch for each rechargeable cell, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art, and it has no patentable significance unless a new and unexpected result is produced, see *In re Harza*, 274F.2d 669, 124 USPQ 378 (CCPA 1960).

As to claims 18-24, see remarks and references for claim 17 above.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

***Response to Arguments***

Art Unit: 2838

6. Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection. Applicant amended claims 17 and 24 to include "the charge and discharge switches being closed in response to the electronics device and the controller being in agreement to charge one of the smart batteries, and either of the charge or the discharge switches being opened in response to directions from the electronics device or the controller", which is new issue.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in PTO-892 and not mentioned above disclose related apparatus:

**<http://www.mcc-us.com/SBSRescue.pdf>** discloses a "Smart Battery", a **battery pack with added internal electronics** that can measure, compute, and store battery data, and one that can communicate with other SBS devices over the SMBus;

**<http://www.embedded.com/97/feat9611.htm>** discloses that Duracell and Intel have jointly created a standardized battery/power system interface and placed it into the public domain, including a "**smart battery**". This article describes this host-"smart battery" interface specification.

**Sawyers [6888337]** discloses an information handling system, as described in the instant application, except for the charge/discharge switches being separable.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Pia Tibbits whose telephone number is 571-272-2086. If unavailable, contact the Supervisory Patent Examiner Karl Easthom whose telephone number is 571-272-1989. The Technology Center Fax number is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2838

PFT

November 26, 2005

Pia Tibbits

Primary Patent Examiner

A handwritten signature consisting of a stylized letter 'P' followed by 'ia Tibbits'.